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Background Document

For Proposed Amendments To

301 CMR 41.00
Toxic or Hazardous Substance List

Regulatory Authority:
M.G.L. Chapter 21I, §§ 4 and 9

September 2014

Contents

I. INTRODUCTION

The Executive Office of Energy and Environmental Affairs (EEA), as chair of the Administrative Council on Toxic Use Reduction (TUR), is proposing to amend the Toxic or Hazardous Substance List regulations, (301 CMR 41.00), to implement decisions made by the Administrative Council in calendar year 2014, pursuant to its duties under the Toxics Use Reduction Act (TURA, M.G.L. c. 21I, as amended in July 2006). Specifically, the Council voted to designate 1-Bromopropane (n-Propyl Bromide (CAS 106-94-5)), Hydrogen Fluoride (CAS 7664-39-3), Cyanide Compounds (*TURA #1016*), Toluene Diisocyanate (listed as CAS: 2,4-TDI [584-84-9]; 2,6-TDI [91-08-7]; and TDI mixed isomers [26471-62-5]), and Dimethylformamide (CAS 68-12-2) as Higher Hazard Substances.

II. BACKGROUND AND PURPOSE

Originally enacted in 1989, TURA requires certain facilities to report their use of toxic chemicals and examine ways to decrease their use and the wastes generated from use, with the goal of protecting public health, the environment, and workers, while helping business's manufacturing operations to become more efficient, sustainable and globally competitive.

TURA committed Massachusetts to reduce toxic byproducts (meaning all varieties of non-product output resulting from the use of a toxic chemical, such as air emissions, water discharges, and hazardous wastes). Since 2000, the TURA program has helped Massachusetts businesses to reduce toxics use by 23% and toxic byproducts by 42%[1], reducing chemical transportation risks, workplace hazards, and toxics in products, while helping Massachusetts businesses remain competitive in a global marketplace increasingly aware of toxics issues.

From its inception, TURA established an Administrative Council on Toxics Use Reduction that has the responsibility, among other duties, to make adjustments to the Toxic or Hazardous Substance List. As the chair of the Council, the Secretary of EEA promulgates the Council's actions in regulations.

TURA was amended on July 28, 2006, by "An Act Amending the Toxics Use Reduction Act" (Chapter 188 of the Acts of 2006). The 2006 TURA amendments provided for the careful review of the Toxic or Hazardous Substance List that triggers regulatory coverage under TURA when facilities use greater than threshold amounts of chemicals on the list. Specifically, it directed the Administrative Council to consider whether chemicals should be designated as higher or lower hazard substances. This regulatory package implements the actions taken by the Administrative Council during calendar year 2014 affecting the TURA list of reportable chemicals.

[1] Measured using 2012 data normalized for changes in production reported by a core group of industries that have been subject to reporting since 2000.

III. DESCRIPTION OF THE PROPOSED REGULATIONS

A. Toxic or Hazardous Substance List, 301 CMR 41.00

Higher Hazard Designations

When first enacted, TURA did not differentiate toxics according to their level of hazard. The 2006 statutory amendments gave the Council the authority and responsibility, in consultation with the Toxics Use Reduction Institute (TURI) and the Science Advisory Board (SAB), to designate a toxic substance as higher hazard or lower hazard, or to leave the substance uncategorized. For a higher hazard substance, the threshold for reporting is lowered to 1,000 pounds, (from 10,000 or 25,000 pounds), and the Council has authority to further lower the reporting threshold. Persistent, bio-accumulative, and toxic chemicals (PBTs) are automatically designated as higher hazard substances, (and already have reporting thresholds lower than 1,000 pounds, as established by the United States Environmental Protection Agency (USEPA). For a lower hazard substance, the "per chemical" fee is eliminated.

The following is the process for designating higher hazard and lower hazard substances:

1. The SAB reviews the scientific data and recommends designations;
2. TURI prepares a policy analysis of the recommended designations for the Council's consideration in consultation with the Massachusetts Office of Technical Assistance (OTA) and MassDEP;
3. The TURA Advisory Committee reviews the recommendations;
4. The Council takes action on the recommended designations;
5. EEA promulgates the Council's action in 301 CMR 41.00;
6. The designations take effect in the calendar year after the year the designations are promulgated in 301 CMR 41.00.

Prior to these proposed regulations, the Administrative Council designated trichloroethylene, cadmium, and cadmium compounds, as higher hazard substances beginning with reporting year 2008, and designated perchloroethylene as a higher hazard substance beginning with reporting year 2009, formaldehyde and hexavalent chromium compounds as higher hazard substances in reporting year 2012, and methylene chloride as a higher hazard substance in reporting year 2014.

The Council also designated three substances as lower hazard substances beginning with reporting year 2009: isobutyl alcohol, sec-butyl alcohol, and n-butyl alcohol. Beginning in reporting year 2010 the Council designated an additional seven chemicals as lower hazard substances: butyl acetate, iso-butyl acetate, ferric chloride, ferrous chloride, ferric sulfate, ferrous sulfate, and ferrous sulfate heptahydrate.

The proposed regulations would designate 1-Bromopropane (n-Propyl Bromide (CAS 106-94-5)), Hydrogen Fluoride (CAS 7664-39-3), Cyanide Compounds (*TURA #1016*), Toluene Diisocyanate (listed as CAS: 2,4-TDI [584-84-9]; 2,6-TDI [91-08-7]; and TDI mixed isomers [26471-62-5]), and Dimethylformamide (CAS 68-12-2) as Higher Hazard Substances. In making its decision to designate the chemicals as Higher Hazard Substances, the Council relied

on the recommendation of the SAB, TURI's policy analysis[2], comments by the Advisory Committee, and their judgment of the importance of the information they received concerning the hazards posed by the chemicals and the benefits of designation.

IV. ECONOMIC IMPACTS

The cost associated with annual reporting to MassDEP consists of a base fee and a per-chemical fee. The base fee depends on the size (number of employees) of the facility; the per-chemical fee is the same for all facilities, and is set at $1,100. Small businesses (companies with less than 10 employees) are specifically exempt and do not report to TURA. If a facility were already a TURA filer, then reporting on a higher hazard chemical would simply add $1,100 to the amount already paid by that facility. If they are not currently covered by TURA, then the fees associated with reporting a higher hazard chemical are as follows:

Number of employees	Base fee	Base fee + one chemical
10-49	$1,850	$2,950
50-99	$2,775	$3,875
100-499	$4,625	$5,725
> 500	$9,250	$10,350

Companies will also incur costs associated with TUR report and plan preparation. Facilities will incur larger preparation costs the first time they file a Form S with the MassDEP and prepare a toxics plan, than they will in subsequent reporting and planning years. As companies adjust to the routine of TUR reporting, the cost of implementation declines.

OTA is mandated to assist first-time filers, and its services are provided at no charge. Covered facilities may take advantage of OTA's assistance to mitigate these first-time costs, and OTA will be reaching out to new filers to offer its help.

The costs of establishing a plan are the same for all the chemicals discussed below, except that for each population using a chemical, the number of companies that have already established a plan is different. After two years of reporting toxics use, companies are required to engage in TUR planning. Only those companies that have never had to do planning before would experience the major portion of the costs described below. For companies that only need to report the Higher Hazard Substance the cost of hiring a planner will likely be in the range of $1,000 - $3,000. Companies that want to have their own in-house TUR planner can qualify either by relying on past work experience in toxics use reduction or by having a staff member take the TUR Planners' training course. Those companies with experienced staff can become certified for as little as $100. For those that want staff to take a course the cost will be between $650- $2000 depending on whether the company has previously filed a TURA report. Higher

[2] Toxic Use Reduction Institute Summary of Policy Analysis, Higher Hazard Substance Designation Recommendations: *1 Bromopropane n-Propyl Bromide (CAS 106-94-5)*, May 15, 2014; *Hydrogen Fluoride (CAS 7664-39-3)*, August 12, 2014; *Cyanide Compounds (TURA #1016)*, August 12, 2014; *Toluene Diisocyanate (listed as CAS: 2,4-TDI [584-84-9]; 2,6-TDI [91-08-7]; and TDI mixed isomers [26471-62-5])*, August 12, 2014; *Dimethylformamide (CAS 68-12-2)*, August 12, 2014.

Hazard Substance designation will not result in the imposition of these costs on companies that have already had to do planning, as they will already have incurred these costs of establishing the planning process and acquiring the trained expertise needed to review the plan.

The cost of planning depends on the number of chemicals used and the complexity of the process, but experience has shown that establishing a plan has many potential benefits for companies. Companies with in-house toxics use reduction planners are likely to reap ancillary benefits from having an employee on staff that is knowledgeable about methods for reducing the costs and liabilities of toxics use. Companies that use external consultation are likely to reap benefits from bringing in a trained practitioner who may have wide experience in toxics use reduction and related matters. Additionally, through the process of planning and reducing or eliminating higher hazard substances, companies will be more likely to find ways to make their workplaces and products safer. They will be motivated to find ways to eliminate the costs of managing highly hazardous and highly regulated waste products and releases. They may be able to expand their markets, better comply with other regulations and reduce their overall regulatory burden, as well as insurance costs, the cost of emergency planning and response, and the risks of litigation resulting from accidents, exposures and contamination.

Designating the substances discussed herein as Higher Hazard Substances would help to fulfill the intent of the 2006 amendments to TURA, providing important guidance and incentives to Massachusetts businesses to help them move away from the most hazardous chemicals and toward safer alternatives. Designation does not require any business that must continue to use one of these chemicals to stop using it, but will likely cause them to exercise greater care. Many businesses affected by past designations have found they were able to eliminate use, or reduce use below the threshold for coverage under TURA.

To develop an estimate of the number and type of companies likely to be affected by a 1,000 lb reporting threshold, we consulted sources including the TURA data; facilities reporting under EPCRA Tier II requirements; RCRA hazardous waste data; and past experience with other HHS designations. Only facilities with ten or more Full-Time Employees (FTEs) would be covered by HHS designation.

Designation of 1-Bromopropane (n-Propyl Bromide) as a Higher Hazard Substance

N-propyl bromide was added to the TURA list in 2009, with the first reporting year being 2010. In 2010 and 2011, n-propyl bromide was reported under TURA by the sectors listed below.

3449	Miscellaneous metal products
3674	Semiconductors and related devices
3675	Electronic capacitors

Source: TURA Data

Since reporting began in 2010, 3 companies reported use of the chemical.

- In SIC Code 3449, “miscellaneous metal products”, 1 company otherwise used n-propyl bromide.

- In SIC code 3674, "semiconductors and related devices" 1 company otherwise used n-propyl bromide.
- In SIC code 3675, "electronic capacitors", 1 company otherwise used n-propyl bromide.

In addition to the information sources noted above, staff at the Office of Technical Assistance (OTA) and the TURI Laboratory developed estimates based on their experience working with industry, and MassDEP's Environmental Results Program contained additional information. Based on these sources, TURA program staff estimate the following impact:

- 34xx (fabricated metal products), is expected to result in 3 to 5 filers
- The following sectors are expected to generate between one and three filers each: 2891 (adhesives and sealants), 3675 (electronic capacitors), 5169 (wholesale trade - chemicals and allied products), 7216 (dry cleaning).

We estimate that a 1,000 lb reporting threshold would affect between 6 and 17 filers. These would include some facilities that are already reporting on their use of toxic chemicals and now have to include n-propyl bromide in their annual reporting, as well as some that could be new to the program.

There would be some additional cost to companies that would begin reporting n-propyl bromide based on a lower reporting threshold, including preparing annual toxics use reports and biennial toxics use reduction plans, and paying toxics use fees. The average base fee paid by TURA filers in 2010 was $3,425. However, most new filers for n-propyl bromide are likely to be facilities with fewer than 50 employees. The base fee for this size facility is $1,850. Some filers would not be new to the program and already pay a base fee, but would begin to pay an additional per-chemical fee of $1,100.

The total additional cost in fees to filers (and revenue to the program) could be $6,600 to $18,700 in per-chemical fees (6-17 filers for n-propyl bromide) plus an estimated $5,550-$14,800 (base fee for 3-8 small sized [less than 50 employees] companies reporting n-propyl bromide only).

Designation of Hydrogen Fluoride (HF) as a Higher Hazard Substance

In 2012, the most recent year for which data are available, four companies reported the use of HF under TURA.

- In SIC Code 3411, "metal cans", 1 company otherwise used hydrogen fluoride.
- In SIC Code 3462, "iron and steel forgings", 1 company otherwise used hydrogen fluoride.
- In SIC Code 3674, "semiconductors and related devices," 2 companies manufactured and otherwise used hydrogen fluoride.

In addition, two car wash formulators reported ammonium bifluoride in 2012, which when put into solution will dissociate into HF and ammonium fluoride.

Uses of HF reported under TURA include etching, cleaning of metals and production of glass

fibers, among others. HF can also be used as a catalyst or fluorination feedstock. A total of 32 facilities have reported HF use under TURA at some point. These facilities have been in the following sectors:

2842	Polishes and sanitation goods
3229	Pressed and blown glass
3291	Abrasive products
3316	Cold finishing of steel shapes
3357	Drawing and Insulating of Nonferrous Wire
3411	Metal cans
3462	Iron and steel forgings
3479	Metal coating and allied services
3661	Telephone and telegraph apparatus
3674	Semiconductors and related devices
3822	Environmental controls
4911	Electric services
5169	Chemicals and allied products

Source: TURA Data

The EPCRA Tier II data show that 57 facilities reported storing HF in 2012, and the RCRA data show that 37 facilities reported HF in hazardous waste shipments in 2012. Additionally, TIER II data show that 9 companies stored ammonium fluoride or ammonium bifluoride in 2012.

Storage of at least 500 lb onsite was used as a basis for estimating the number of facilities that may be using at least 1,000 lb/year of HF. Based on the maximum amounts reported under Tier II for 2012, 22 facilities that have at least 10 FTEs have reported at least 500 lb of HF stored onsite, and 3 additional facilities with at least 10 employees have reported at least 500 lb of ammonium fluoride or ammonium bifluoride stored onsite. Sectors represented in this data set include electronics, etching, and metal finishing, among others. Eight of these are past TURA filers.

Some utilities also generate HF as a byproduct; these are not reflected in the Tier II data as they do not store HF onsite. One or more utilities could meet the 1,000 lb/year threshold. One additional facility that appears to be in a TURA sector reports HF shipments above 1,000 lb in its hazardous waste data reported under RCRA.

We estimate based on this information that up to 26 new filers would be brought in by the HHS designation; most of these would be facilities that already file under TURA for other chemicals, and a few would be new to TURA.

There would be some additional cost to companies that would begin reporting HF based on a lower reporting threshold, including preparing annual toxics use reports and biennial toxics use reduction plans, and paying toxics use fees.

Based on the Tier II data, we estimate new reporting by up to 26 facilities, fairly evenly distributed between companies with 100-499 employees, 50-99 employees, and 10-49

employees. Most of these filers would not be new to the program and already pay a base fee, but would begin to pay a per chemical fee of $1,100. In addition, some facilities are already paying the maximum fee corresponding to their size; these facilities would not pay any additional fee.

Assuming 26 new HF filers with the size distribution listed above, assuming that four of them are completely new to TURA, and assuming that five of the facilities currently reporting under TURA have already reached their fee maximum, the total additional cost in fees to filers (and revenue to the program) could be approximately $38,000.

Designation of Cyanide Compounds as Higher Hazard Substances

In 2012, the most recent year for which data are available, three companies reported the use of cyanide compounds under TURA, all in plating processes.

SIC Code		No. of 2012 Filers	Type of Use
3351	Copper rolling and drawing	1	Processed
3471	Plating and polishing	2	Otherwise used

Source: TURA Data

Reports filed under EPCRA Tier II and under RCRA indicate current or recent cyanide compound use by additional facilities. The EPCRA Tier II data show 48 facilities reporting cyanide compounds in 2012 and the RCRA data show 250 hazardous waste shipments. Fourteen facilities have reported cyanide compounds under TURA at some point.

Storage of at least 1000 lb onsite was used as a basis for estimating the number of facilities that may be using at least 1,000 lb/year of cyanide compounds. Based on the maximum amounts reported under Tier II for 2012, 23 facilities have reported at least 1000 lb of cyanide compounds stored onsite and have at least 10 FTEs. Sectors represented in this data set are primarily plating and metal finishing operations. Seventeen of these are current or past TURA filers. Two additional facilities that appear to be in a TURA sector report shipments of cyanides above 1000 lbs in hazardous waste data reported under RCRA.

We estimate that up to 25 new filers would be brought in by the HHS designation; most of these would be facilities that already file under TURA for other chemicals, and a few would be new to TURA.

There would be some additional cost to companies that would begin reporting cyanide compounds based on a lower reporting threshold, including preparing annual toxics use reports and biennial toxics use reduction plans, and paying toxics use fees.

Based on the Tier II and RCRA data, we estimate new reporting by 25 facilities. Current Tier II and TURA filers are primarily 10-99 employees with a few companies sized over 500 employees. Predicted new filers appear to be mostly under 50 employees.

Most of these filers would not be new to the program and already pay a base fee, but would begin to pay a per-chemical fee of $1,100. In addition, some facilities are already paying the maximum fee corresponding to their size; these facilities would not pay any additional fee.

Assuming 25 new cyanide compound filers, with 7 small companies new to the program and 8 additional facilities that have already reached their maximum fee, the total additional cost in fees to filers (and revenue to the program) could be approximately $33,450.

Designation of Toluene Diisocyanates as Higher Hazard Substances

In 2012, the most recent year for which data are available, five companies reported the use of TDI under TURA, as shown in the table below.

SIC Code		No. of 2012 Filers	Type of Use
2821	plastics materials and resins	2	Processed
2851	paints and allied products	1	Processed
2891	adhesives and sealants	1	Processed
3086	plastics foam products	1	Processed

Source: TURA Data

Historically, the following sectors have reported TDI use under TURA:

2821	Plastics materials and resins
2824	Organic fibers, noncellulosic
2851	Paints and allied products
2891	Adhesives and sealants
2899	Chemical preparations, not elsewhere classified
3086	Plastics foam products
3732	Boat building and repairing
3861	Photographic equipment and supplies
3944	Games, toys, and children's vehicles
5169	Chemicals and allied products

Source: TURA Data

Some additional information on TDI use can be obtained from the EPCRA Tier II data on hazardous chemical storage as well as the RCRA data on hazardous waste shipments.

- The Tier II data for 2012 show a total of seven facilities reporting TDI storage. Of these, four also filed under TURA. Based on employment data and maximum amount codes, it is reasonable to expect that either one or two of these facilities would be brought into TURA by the HHS designation.
- The RCRA data for 2012 show that ten facilities reported hazardous waste shipments of TDI (mixed isomers). Two of the facilities reporting shipment of hazardous waste currently report TDI use under TURA and one has filed in the past.

The TURA program estimates that approximately 2 to 9 new filers would be brought in by the HHS designation. Of these, approximately half would be facilities that already file, or have filed in the past, for other chemicals.

There would be some additional cost to companies that would begin reporting TDI based on a lower reporting threshold, including preparing annual toxics use reports and biennial toxics use reduction plans, and paying toxics use fees.

Most of these filers would not be new to the program and already pay a base fee, but would begin to pay a per-chemical fee of $1,100. In addition, some facilities are already paying the Assuming 2 to 9 new TDI filers with the size distribution listed above, assuming that 2 of them are completely new to TURA, and assuming that 2 of the facilities currently reporting under TURA have already reached their fee maximum, the total additional cost in fees to filers (and revenue to the program) could be approximately $4,150 to $13,250.

Designation of Dimethylformamide (DMF) as a Higher Hazard Substance

In 2012, the most recent year for which data are available, eight companies reported the use of DMF under TURA.

SIC Code		No. of 2012 Filers	Type of Use
2295	coated fabrics, not rubberized	3	(1 processed, 3 otherwise used)
2851	paints and allied products	1	Processed
2891	adhesives and sealants	1	Otherwise used
5169	chemicals and allied products	3	Processed

Source: TURA Data

A total of 31 facilities have reported DMF use under TURA at some point. These facilities have been in the following sectors:

2269	Finishing plants, nec
2295	Coated fabrics, not rubberized
2752	Commercial printing, lithographic
2821	Plastics materials and resins
2851	Paints and allied products
2865	Cyclic crudes and intermediates
2869	Industrial organic chemicals, nec
2891	Adhesives and sealants
2899	Chemical preparations, nec
3471	Plating and polishing
3569	General industrial machinery, nec
3679	Electronic components, nec

3821	Laboratory apparatus and furniture
3861	Photographic equipment and supplies
5169	Chemicals and allied products

Source: TURA Data

Reports filed under EPCRA Tier II indicate current or recent DMF use by additional facilities. The EPCRA Tier II data show that 16 facilities reported storing DMF in 2012. DMF is not a RCRA listed hazardous waste, so there are no data available.

Storage of at least 500 lb onsite was used as a basis for estimating the number of facilities that may be using at least 1,000 lb/year of DMF. Based on the maximum amounts reported under Tier II for 2012, 10 facilities have reported at least 500 lb of DMF stored onsite and have at least 10 FTEs. Sectors represented in this data set include resin facilities, laminating facilities, chemical manufacturing and distributers, among others. Nine of these are past or current TURA filers.

In addition to the types of facilities listed above, DMF is a common laboratory solvent. As well as use as a solvent, it can also be used for organic synthesis. Most laboratory uses are not covered under TURA. For those that are (in facilities that manufacture products) there could be up to 5 new facilities.

We estimate that approximately 2-7 new filers would be brought in by the HHS designation; one of these would be a facility that already files under TURA for other chemicals, and a few would be new to TURA.

There would be some additional cost to companies that would begin reporting DMF based on a lower reporting threshold, including preparing annual toxics use reports and biennial toxics use reduction plans, and paying toxics use fees.

Based on the Tier II data and program staff members' knowledge of use in research labs, we estimate new reporting by 2-7 facilities. Current Tier II facilities are primarily in the 10-49 or 50-99 employee range. One of these filers would not be new to the program and already pays a base fee, but would begin to pay a per-chemical fee of $1,100.

Assuming 2-7 new DMF filers with the size distribution listed above, assuming that three of them are completely new to TURA, the total additional cost in fees to filers (and revenue to the program) could be approximately $7,750 to $19,550.

V. SMALL BUSINESS IMPACT STATEMENT

TURA requires that companies carefully track toxics use and examine ways to reduce the use of chemicals that pose dangers to health, safety and the environment when they are used, stored, shipped, and incorporated into products. Companies are not required to implement specific TUR alternatives identified in their plan, nor does coverage under TURA require that companies stop using chemicals that they deem important to their operations. Participation in TURA can be of general benefit, not just to the Commonwealth, but to the companies regulated by the Act.

There would be some additional cost to companies that would begin reporting a chemical based on a lower reporting threshold, including preparing annual toxics use reports and biennial toxics use reduction plans, and paying toxics use fees.

The TURA program is in a good position to offer services to small businesses interested in reducing or eliminating their use of these chemicals. The program has substantial experience with and expertise in working with small businesses and has a history of working successfully with users on these issues.

Small businesses do not always feel that they have the time or the resources to fully evaluate either the risks and costs imposed by their current use of highly hazardous substances, or to investigate alternatives. The use of hazardous substances can cause accidents, high-cost management, and potential liabilities pertaining to regulation, litigation and insurance, as well as reducing the attractiveness of products and commercial partnerships. Motivating small businesses to consider reducing such use, and helping them to understand their options, has significant benefits that cannot be quantified in advance. However, the history of the program supports the expectation that many companies will be motivated to engage in the effort to become safer, and many will use the resources of the program to supplement their efforts.

Activities of both OTA and TURI already provide infrastructure which could help smaller users to reduce their use of these chemicals. Several on-going program activities would help meet the demand for services.

- Both the OTA and the TURI Lab have significant experience helping large and small users identify safer alternatives to n-propyl bromide and both are available as a resource for small businesses entering the program. The TURI Lab has conducted solvent cleaning alternative testing since 1993, assisting businesses in making the transition to less toxic alternatives without compromising performance.
- The TURA program's ability to help facilities choose the best possible alternative for a given use is particularly important given that some of the available alternatives are preferable to others not only from an effectiveness standpoint but from a safety, health, and environmental perspective. The TURA program is able to assist facilities both in analyzing alternatives, and in adopting the alternatives that pose the fewest health and environmental concerns.
- TURI has an academic research grant program that can target seed funding to researchers who are developing safer alternatives to these proposed Higher Hazard Substances used in a specific application. When specific industry needs are identified, along with companies willing to share performance criteria, materials and/or other forms of expertise, TURI can identify university researchers interested in focusing their R&D efforts for solutions. If a specific application of the use of these chemicals presents an on-going challenge for companies with respect to shifting to safer alternatives, TURI could direct R&D efforts to find feasible solutions.

VI. AGRICULTURAL IMPACTS

Pursuant to MGL c. 30A, Section 18, state agencies must evaluate the impact of proposed programs on agricultural resources within the Commonwealth. The proposed revisions are intended to further reduce the use and release of toxic substances into the environment. The proposed regulations are not expected to have any negative impacts on agricultural production in Massachusetts.

VII. IMPACTS ON MUNICIPALITIES

Pursuant to Executive Order 145, state agencies must assess the fiscal impact of new regulations on the Commonwealth's municipalities. Municipalities are statutorily exempt from TURA and therefore the proposed amendments will have no direct effect on them. However, municipalities are likely to benefit from reduced pollution and associated risks to the extent the proposed amendments reduce the use of toxic substances in their jurisdictions. This action can reduce the costs, severity and frequency of emergencies requiring response from municipal authorities, the incidence of exposures requiring medical treatment, and the likelihood of land or water contamination requiring treatment.

VIII. MASSACHUSETTS ENVIRONMENTAL POLICY ACT (MEPA)

Pursuant to 301 CMR 11.03(12) (MEPA Regulations), these proposed regulations will not reduce standards for environmental protection, opportunities for public participation in permitting or other review processes, or public access to information generated or provided in accordance with these regulations. Promulgation of these regulations, therefore, does not require the filing of an Environmental Notification Form under MEPA.

IX. IMPACTS ON OTHER PROGRAMS – AIR TOXICS

Air toxics are a group of chemical air contaminants that are associated with significant environmental impacts or adverse health effects such as cancer, reproductive effects and birth defects. The federal Clean Air Act requires EPA to promulgate source-specific controls based on Maximum Achievable Control Technologies (MACT) for air toxics. Hydrogen fluoride, toluene diisocyanate, cyanide compounds, and dimethylformamide are regulated as air toxics.

In addition, MassDEP controls air toxics through reductions of criteria pollutants and through its Toxics Use Reduction Program. Toxics use reduction is a MassDEP priority. Toxics use reduction is defined as in-plant changes in production processes or raw materials that reduce, avoid, or eliminate the use of toxic or hazardous substances or generation of hazardous byproducts per unit of product, so as to reduce risks to the health of workers, consumers, or the environment, without shifting risks between workers, consumers, or parts of the environment. The proposed regulations will likely reduce the use and release of these air toxics pollutants.

XI. PUBLIC PARTICIPATION

M.G.L. Chapter 30A requires the Executive Office of Energy and Environmental Affairs to give public notice and provide an opportunity to review the proposed regulations at least 21 days prior to holding a public hearing. The hearing will be held in accordance with the procedures of M.G.L. Chapter 30A. The public hearing notice, proposed regulations and background document are

available on EOEEA's website: http://tinyurl.com/tur-regulations or www.mass.gov/eea/waste-mgnt-recycling/toxics/toxic-use-reduction/tura-program-regulations.html

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